

Serial Number: 091830446

 Changed a file from non-ASCII to ASCII Changed the margins in cases where the sequence text was "wrapped" down to the next line Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____ Added the mandatory heading and subheadings for "Current Application Data". Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: Deleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file; page numbers throughout text; other invalid text, such as _____ Inserted mandatory headings, specifically: Corrected an obvious error in the response, specifically:Seq. Nos. 36 + 45 - Misnumbering of Codons; were properly corrected Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an error in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: Other:

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

PCT09

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/830,446

DATE: 11/07/2001
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 7 <130> FILE REFERENCE: 77813-51
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/830,446
 C--> 10 <141> CURRENT FILING DATE: 2001-09-21
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 56 Met Lys Ile Pro Leu
 57 1 5
 59 cgc ttt tta ttg ata tca tta gta cct acg ctt tct atg tcg aat tta 163
 60 Arg Phe Leu Leu Ile Ser Leu Val Pro Thr Leu Ser Met Ser Asn Leu

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| 65 | 25 | 30 | 35 | |
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| 68 | Gly Thr Thr Ser Thr Ser Phe Ser Ser Lys Thr Ser Ser Ala Thr | | | |
| 69 | 40 | 45 | 50 | |
| 71 | gat ggc acc aat tat gtt ttt aaa gat tct gta gtt ata gaa aat gta | | | 307 |
| 72 | Asp Gly Thr Asn Tyr Val Phe Lys Asp Ser Val Val Ile Glu Asn Val | | | |
| 73 | 55 | 60 | 65 | |
| 75 | ccc aaa aca ggg gaa act cag tct act agt tgt ttt aaa aat gac gct | | | 355 |
| 76 | Pro Lys Thr Gly Glu Thr Gln Ser Thr Ser Cys Phe Lys Asn Asp Ala | | | |
| 77 | 70 | 75 | 80 | 85 |
| 79 | gca gct gga gat cta aat ttc tta gga ggg gga ttt tct ttc aca ttt | | | 403 |
| 80 | Ala Ala Gly Asp Leu Asn Phe Leu Gly Gly Phe Ser Phe Thr Phe | | | |
| 81 | 90 | 95 | 100 | |
| 83 | agc aat atc gat gca acc acg gct tct gga gct gct att gga agt gaa | | | 451 |
| 84 | Ser Asn Ile Asp Ala Thr Ala Ser Gly Ala Ala Ile Gly Ser Glu | | | |
| 85 | 105 | 110 | 115 | |
| 87 | gca gct aat aag aca gtc acg tta tca gga ttt tcg gca ctt tct ttt | | | 499 |
| 88 | Ala Ala Asn Lys Thr Val Thr Leu Ser Gly Phe Ser Ala Leu Ser Phe | | | |
| 89 | 120 | 125 | 130 | |
| 91 | ctt aaa tcc cca gca agt aca gtg act aat gga ttg gga gct atc aat | | | 547 |
| 92 | Leu Lys Ser Pro Ala Ser Thr Val Thr Asn Gly Leu Gly Ala Ile Asn | | | |
| 93 | 135 | 140 | 145 | |
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| 96 | Val Lys Gly Asn Leu Ser Leu Leu Asp Asn Asp Lys Val Leu Ile Gln | | | |
| 97 | 150 | 155 | 160 | 165 |
| 99 | gac aat ttc tca aca gga gat ggc gga gca att aat tgt gca ggc tcc | | | 643 |
| 100 | Asp Asn Phe Ser Thr Gly Asp Gly Ala Ile Asn Cys Ala Gly Ser | | | |
| 101 | 170 | 175 | 180 | |
| 103 | ttg aag atc gca aac aat aag tcc ctt tct ttt att gga aat agt tct | | | 691 |
| 104 | Leu Lys Ile Ala Asn Asn Lys Ser Leu Ser Phe Ile Gly Asn Ser Ser | | | |
| 105 | 185 | 190 | 195 | |
| 107 | tca aca cgt ggc gga gcg att cat acc aaa aac ctc aca cta tct tct | | | 739 |
| 108 | Ser Thr Arg Gly Gly Ala Ile His Thr Lys Asn Leu Thr Leu Ser Ser | | | |
| 109 | 200 | 205 | 210 | |
| 111 | ggt ggg gaa act cta ttt cag ggg aat aca gcg cct acg gct gct ggt | | | 787 |
| 112 | Gly Gly Glu Thr Leu Phe Gln Gly Asn Thr Ala Pro Thr Ala Ala Gly | | | |
| 113 | 215 | 220 | 225 | |
| 115 | aaa gga ggt gct atc gcg att gca gac tct ggc acc cta tcc att tct | | | 835 |
| 116 | Lys Gly Gly Ala Ile Ala Ile Ala Asp Ser Gly Thr Leu Ser Ile Ser | | | |
| 117 | 230 | 235 | 240 | 245 |
| 119 | gga gac agt ggc gac att atc ttt gaa ggc aat acg ata gga gct aca | | | 883 |
| 120 | Gly Asp Ser Gly Asp Ile Ile Phe Glu Gly Asn Thr Ile Gly Ala Thr | | | |
| 121 | 250 | 255 | 260 | |
| 123 | gga acc gtc tct cat agt gct att gat tta gga act acg gct aag ata | | | 931 |
| 124 | Gly Thr Val Ser His Ser Ala Ile Asp Leu Gly Thr Ser Ala Lys Ile | | | |
| 125 | 265 | 270 | 275 | |

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| 129 | | | | | | | | | | | | | | | | 280 | | |
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| 144 | Thr | Ser | Lys | Leu | Leu | Gln | Asn | Val | Ala | Phe | Lys | Asn | Gly | Thr | Val | Val | | |
| 145 | | | | | | | | | | | | | | | | 345 | | |
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| 149 | | | | | | | | | | | | | | | | 360 | | |
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| 153 | | | | | | | | | | | | | | | | 375 | | |
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| 155 | gaa | agt | atc | gag | tta | acg | aat | ttg | gaa | att | aat | ata | gac | tct | ctc | agg | 1315 | |
| 156 | Glu | Ser | Ile | Glu | Leu | Thr | Asn | Leu | Glu | Ile | Asn | Ile | Asp | Ser | Leu | Arg | | |
| 157 | | | | | | | | | | | | | | | | 390 | | |
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| 164 | Arg | Ile | Asp | Arg | Pro | Val | Val | Leu | Ala | Ile | Ser | Asp | Glu | Ser | Phe | Tyr | | |
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| 177 | | | | | | | | | | | | | | | | 470 | | |
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| 195 | tcc | aat | gtt | ttg | cat | agg | agc | ggt | cgt | gaa | aat | caa | agg | aaa | ttc | cgt | 1795 |
| 196 | Ser | Asn | Val | Leu | His | Arg | Ser | Gly | Arg | Glu | Asn | Gln | Arg | Lys | Phe | Arg | |
| 197 | 550 | | | | | | | 555 | | | | 560 | | | 565 | | |
| 199 | cat | gtg | agt | gga | ggt | gct | gta | gta | ggt | gct | agc | acg | agg | atg | ccg | ggt | 1843 |
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| 205 | | 585 | | | | | | | 590 | | | | 595 | | | | |
| 207 | gac | tac | ttt | atg | aat | acc | aat | ttc | gca | aag | acc | tac | gca | gga | tct | tta | 1939 |
| 208 | Asp | Tyr | Phe | Met | Asn | Thr | Asn | Phe | Ala | Lys | Thr | Tyr | Ala | Gly | Ser | Leu | |
| 209 | | 600 | | | | | | 605 | | | | 610 | | | | | |
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| 212 | Arg | Leu | Gln | His | Asp | Ala | Ser | Leu | Tyr | Ser | Val | Val | Ser | Ile | Leu | Leu | |
| 213 | | 615 | | | | | | 620 | | | | 625 | | | | | |
| 215 | gga | gag | gga | gga | ctc | cgc | gag | atc | ctg | ttg | cct | tat | gtt | tcc | aag | act | 2035 |
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| 221 | | 650 | | | | | | | 655 | | | | 660 | | | | |
| 223 | cgc | atg | aag | acc | gag | tct | cta | ccc | ccc | ccc | ccc | ccg | acg | ctc | tcg | acg | 2131 |
| 224 | Arg | Met | Lys | Thr | Glu | Ser | Leu | Pro | Pro | Pro | Pro | Pro | Thr | Leu | Ser | Thr | |
| 225 | | 665 | | | | | | 670 | | | | 675 | | | | | |
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| 229 | | 680 | | | | | | 685 | | | | 690 | | | | | |
| 231 | cga | gtt | gtt | gaa | aat | acc | agc | ggc | aga | gga | ttt | ttc | caa | gag | tac | | 2227 |
| 232 | Arg | Val | Ala | Val | Glu | Asn | Thr | Ser | Gly | Arg | Gly | Phe | Phe | Gln | Glu | Tyr | |
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| 235 | act | cca | ttt | gta | aaa | gtc | caa | gct | gtt | tac | gtc | gtc | caa | gat | agc | ttt | 2275 |
| 236 | Thr | Pro | Phe | Val | Lys | Val | Gln | Ala | Val | Tyr | Ala | Arg | Gln | Asp | Ser | Phe | |
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| 239 | gta | gaa | cta | gga | gct | atc | agt | cgt | gat | ttt | agt | gat | tcg | cat | ctt | tat | 2323 |
| 240 | Val | Glu | Leu | Gly | Ala | Ile | Ser | Arg | Asp | Phe | Ser | Asp | Ser | His | Leu | Tyr | |
| 241 | | 730 | | | | | | | 735 | | | | 740 | | | | |
| 243 | aac | ctt | gcg | att | cct | ctt | gga | atc | aag | tta | gag | aaa | cgg | ttt | gca | gag | 2371 |
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| 245 | | 745 | | | | | | 750 | | | | 755 | | | | | |
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 263 ttt gaa tgg cgg gga tct tct cgt agc tat aat gta gat gcg ggt agc 2611
 264 Phe Glu Trp Arg Gly Ser Ser Arg Ser Tyr Asn Val Asp Ala Gly Ser
 265 825 830 835
 267 aaa atc aaa ttt tagcgatttc tcttcgatg ctattttcc atggctattt 2663
 268 Lys Ile Lys Phe
 269 840
 271 ttaaaatgat agccatggtt atagatacgt agtccttatt tcaaagaaga cactgttgca 2723
 273 ttagatacgc tctctgatcc ctcaaaa 2750
 276 <210> SEQ ID NO: 2
 277 <211> LENGTH: 2523
 278 <212> TYPE: DNA
 279 <213> ORGANISM: Chlamydia pneumoniae
 281 <220> FEATURE:
 282 <221> NAME/KEY: CDS
 284 <400> SEQUENCE: 2
 285 atg aag att cca ctc 15
 286 Met Lys Ile Pro Leu
 287 1 5
 289 cgc ttt tta ttg ata tca tta gta cct acg ctt tct atg tcg aat tta 63
 290 Arg Phe Leu Leu Ile Ser Leu Val Pro Thr Leu Ser Met Ser Asn Leu
 291 10 15 20
 293 tta gga gct act acc gaa gag tta tcg gct agc aat agc ttc gat 111
 294 Leu Gly Ala Ala Thr Thr Glu Glu Leu Ser Ala Ser Asn Ser Phe Asp
 295 25 30 35
 297 gga act aca tca aca aca agc ttt tct agt aaa aca tca tcg gct aca 159
 298 Gly Thr Thr Ser Thr Ser Phe Ser Ser Lys Thr Ser Ser Ala Thr
 299 40 45 50
 301 gat ggc acc aat tat gtt ttt aaa gat tct gta gtt ata gaa aat gta 207
 302 Asp Gly Thr Asn Tyr Val Phe Lys Asp Ser Val Val Ile Glu Asn Val
 303 55 60 65
 305 ccc aaa aca ggg gaa act cag tct act agt tgt ttt aaa aat gac gct 255
 306 Pro Lys Thr Gly Glu Thr Gln Ser Thr Ser Cys Phe Lys Asn Asp Ala
 307 70 75 80 85
 309 gca gct gga gat cta aat ttc tta gga ggg gga ttt tct ttc aca ttt 303
 310 Ala Ala Gly Asp Leu Asn Phe Leu Gly Gly Phe Ser Phe Thr Phe
 311 90 95 100
 313 agc aat atc gat gca acc acg gct tct gga gct gct att gga agt gaa 351
 314 Ser Asn Ile Asp Ala Thr Thr Ala Ser Gly Ala Ala Ile Gly Ser Glu
 315 105 110 115
 317 gca gct aat aag aca gtc acg tta tca gga ttt tcg gca ctt tct ttt 399
 318 Ala Ala Asn Lys Thr Val Thr Leu Ser Gly Phe Ser Ala Leu Ser Phe
 319 120 125 130
 321 ctt aaa tcc cca gca agt aca gtg act aat gga ttg gga gct atc aat 447
 322 Leu Lys Ser Pro Ala Ser Thr Val Thr Asn Gly Leu Gly Ala Ile Asn
 323 135 140 145

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/830,446

DATE: 11/07/2001
TIME: 12:36:49

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\11072001\I830446.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date